Complete Summary

GUIDELINE TITLE

2002 national guideline for the management of donovanosis (granuloma inguinale).

BIBLIOGRAPHIC SOURCE(S)

Association for Genitourinary Medicine (AGUM), Medical Society for the Study of Venereal Disease (MSSVD). 2002 national guideline for the management of donovanosis (granuloma inguinale). London: Association for Genitourinary Medicine (AGUM), Medical Society for the Study of Venereal Disease (MSSVD); 2002. Various p. [21 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Donovanosis (granuloma inguinale)

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Infectious Diseases
Obstetrics and Gynecology
Urology

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To present a national guideline for the management of donovanosis (granuloma inguinale)

TARGET POPULATION

- Individuals suspected of having donovanosis, especially those in or from endemic regions
- Individuals diagnosed with donovanosis, including pregnant or lactating mothers

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. Demonstration of Donovan bodies in:
    - Giemsa, Wright or Leishman stain of smears of genital ulcer
    - Silver stain (e.g., Warthin-Stary) or Giemsa stain of biopsied tissue
2. Culture of Klebsiella granulomatis in human peripheral blood monocytes and in HEp-2 cells

    Note: Polymerase chain reaction methods and serological tests for donovanosis are considered but these tests are not yet routinely available

Treatment/Management

1. Antimicrobial therapy:
    - Azithromycin
    - Ceftriaxone
    - Co-trimoxazole
    - Doxycycline
    - Erythromycin
    - Norfloxacin
    - Gentamicin
2. Partner management
3. Follow-up

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The guideline developers obtained information by searching the Cochrane Library and Medline databases from 1966 up to December 2000 using the Medical Subject Headings (MeSH) terms "granuloma inguinale" and free text searching using "granuloma inguinale," "donovanosis," and "Calymmatobacterium granulomatis and Klebsiella granulomatis." The Embase database was searched from 1980 to December 2000. References of all retrieved articles were checked in order to identify additional material. Index Medicus from 1879-1965 was searched for all articles on granuloma inguinale by the author for an extended review of diagnosis and treatment of donovanosis published in 1991.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence:

Ia

- Evidence obtained from meta-analysis of randomised controlled trials

Ib

- Evidence obtained from at least one randomised controlled trial

IIa

- Evidence obtained from at least one well designed controlled study without randomisation

IIb

- Evidence obtained from at least one other type of well designed quasi-experimental study

III

- Evidence obtained from well designed non-experimental descriptive studies such as comparative studies, correlation studies, and case control studies

IV

- Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The revision process commenced with authors being invited to modify and update their 1999 guidelines. These revised versions were posted on the website for a 3 month period and comments invited. The Clinical Effectiveness Group and the authors concerned considered all suggestions and agreed on any modifications to be made.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Grading of Recommendations:

A (Evidence Levels Ia, Ib)

- Requires at least one randomised controlled trial as part of the body of literature of overall good quality and consistency addressing the specific recommendation.

B (Evidence Levels IIa, IIb, III)

- Requires availability of well conducted clinical studies but no randomised clinical trials on the topic of recommendation.

C (Evidence Level IV)

- Requires evidence from expert committee reports or opinions and/or clinical experience of respected authorities.
- Indicates absence of directly applicable studies of good quality.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The initial versions of the guidelines were sent to the following for review:

- Clinical Effectiveness Group (CEG) members
- Chairs of UK Regional GU Medicine Audit Committees who had responded to an invitation to comment on them
- Chair of the Genitourinary Nurses Association (GUNA)
- President of the Society of Health Advisers in Sexually Transmitted Diseases (SHASTD)
- Clinical Effectiveness Committee of the Faculty of Family Planning and Reproductive Health Care (FFP)

Comments were relayed to the authors and attempts made to reach a consensus on points of contention with ultimate editorial control resting with the Clinical Effectiveness Group. Finally, all the guidelines were ratified by the councils of the two parent societies.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Levels of evidence (I-IV) and grades of recommendation (A-C) are defined at the end of the "Major Recommendations" field.

Diagnosis

The main method of diagnosis is the demonstration of Donovan bodies in either:

(i) cellular material taken by scraping/impression smear/swab/crushing of pinched off tissue fragment on to glass slide

OR

(ii) tissue sample collected by biopsy

Smears can be stained with Giemsa, Wright's stain, or Leishman stain. Biopsies are best stained with silver stains (for example, Warthin-Stary) or Giemsa.

Donovan bodies are characterised by (i) location within large (20-90 micrometers) histiocytes, (ii) pleomorphic appearance 1-2 x 0.5-0.7 micrometers, (iii) bipolar densities and a capsule often visible, (iv) stain Gram negative.

Expert opinion has estimated that in endemic areas identification of Donovan bodies is achievable in 60% to 80% of patients considered to have donovanosis on clinical grounds.

Successful culture of the causative organism, Klebsiella granulomatis, has recently been reported in human peripheral blood monocytes and in HEp-2 cells. (Carter et al., 1997; Kharsany et al., 1997) Both polymerase chain reaction (PCR) methods (Carter et al., 1999) and serological tests (Freinkel et al., 1992) for donovanosis have been described but are not yet routinely available.

Management

All patients with active lesions shown to contain Donovan bodies should receive antimicrobial treatment. Patients from areas endemic for donovanosis with a clinical diagnosis of the disease should be given presumptive treatment. Treatment options are presented in Table 1, below, which lists drugs shown to be effective in the treatment of donovanosis in prospective studies. Drugs have been selected on the basis of current availability, lack of major toxicity, and convenient dosage regimens. Older drugs known to be effective but not included are trivalent antimonials, streptomycin, chloramphenicol, thiamphenicol, chlortetracycline, and oxytetracycline. Ampicillin has been omitted because of conflicting data on efficacy. Recent experience with azithromycin in Australia has been so encouraging in all categories of patient that a proposal to eradicate donovanosis by the year 2003 in Australia has been formally adopted. (Mein et al., 1996; Bowden & Savage, 1998a; Bowden & Savage, 1998b)

Table 1. Drugs Shown to be Effective in the Treatment of Donovanosis (modified by National Guideline Clearinghouse [NGC])

Drug	Dose	Route	Grading of Recommendation	Level of Evidence
Azithromycin	1 g weekly or 500 mg daily	Oral	B	Ib
Ceftriaxone	1 g daily	Intramuscular/Intravenous	B	IIb
Co-trimoxazole*	160/800 mg twice daily	Oral	B	IIb

Doxycycline*	100 mg twice daily	Oral	C	IV
Erythromycin*	500 mg four times daily	Oral	C	IV
Norfloxacin	400 mg twice daily	Oral	B	IIb
Gentamicin*	1 mg/kg every 8 hours	Intramuscular/Intravenous	C	III

*Currently recommended by the U.S. Centers for Disease Control and Prevention (CDC).

Notes on Table 1

- Azithromycin is recommended for donovanosis in the Australian Antibiotic Guidelines.
- The U.S. Centers for Disease Control and Prevention (CDC) recommends ciprofloxacin which has better bioavailability than norfloxacin.
- Gentamicin recommended by the U.S. Centers for Disease Control and Prevention as an adjunct to therapy in patients whose lesions do not respond in the first few days to other agents.
- Doxycycline has not been individually assessed prospectively and recommendations are based on trials carried out with older tetracyclines (oxytetracycline, chlortetracycline, etc.) which are assumed to be equivalent to doxycycline, which is chosen for more convenient twice daily dosing.
- Duration of treatment should be until lesions have healed. Healing times vary greatly between patients. The U.S. Centers for Disease Control and Prevention recommends a minimum of 3 weeks' treatment.

Treatment for Pregnant or Lactating Mothers

Gentamicin, doxycycline, co-trimoxazole, and norfloxacin are not recommended for pregnant or lactating women. Erythromycin has been used successfully in pregnant women with donovanosis. Children born to mothers with untreated genital lesions of donovanosis are at risk of infection and a course of prophylactic antibiotics should be considered.

Partner Management

Any person with a history of unprotected sexual contact with a patient with active donovanosis or within 40 days before the onset of lesions should be assessed clinically for evidence of infection and offered treatment. This recommendation is

based on best estimates of the incubation period reported by one researcher who studied 60 patients and found an incubation period of between 3 and 40 days in 92% of patients. (Clarke, 1947)

Follow Up

Patients should be followed until symptoms have resolved.

Definitions:

Levels of Evidence:

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C (Evidence Level IV)

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- Indicates absence of directly applicable studies of good quality.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is graded and identified for select recommendations (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate management of donovanosis

POTENTIAL HARMS

Not stated

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The Clinical Effectiveness Group reminds the reader that guidelines in themselves are of no use unless they are implemented systematically. The following auditable outcome measure is provided:

- All cases of donovanosis should be subjected to clinicopathological review. Target 100%.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1999 Aug (revised 2002)

GUIDELINE DEVELOPER(S)

British Association of Sexual Health and HIV - Medical Specialty Society

SOURCE(S) OF FUNDING

The Medical Society for the Study of Venereal Diseases (MSSVD), 3M Health Care Ltd, and Stiefel Laboratories (UK) Ltd met the costs of publishing the document.

GUIDELINE COMMITTEE

Clinical Effectiveness Group (CEG)

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Author: John Richens

Clinical Effectiveness Group (CEG) Members: Keith Radcliffe (Chairman); Imtyaz Ahmed-Jushuf; Jan Welch; Mark FitzGerald; Janet Wilson

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Conflict of interest: None

GUIDELINE STATUS

This is the current release of the guideline. This guideline updates a previously released version.

An update is not in progress at this time.

GUIDELINE AVAILABILITY

Electronic copies: Available in HTML format from the Association for Genitourinary Medicine (AGUM) Web site. Also available in Portable Document Format (PDF) from the Medical Society for the Study of Venereal Diseases (MSSVD) Web site.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- UK national guidelines on sexually transmitted infections and closely related conditions. Introduction. Sex Transm Infect 1999 Aug;75(Suppl 1):S2-3.

Electronic copies: Available in Portable Document Format (PDF) from the Medical Society for the Study of Venereal Diseases (MSSVD) Web site.

The following is also available:

- Revised UK national guidelines on sexually transmitted infections and closely related conditions 2002. Sex Transm Infect 2002;78:81-2

Print copies: For further information, please contact the journal publisher, BMJ Publishing Group.

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on June 15, 2000. The information was verified by the guideline developer on October 13, 2000. This summary was updated on June 24, 2002.

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